

WHAT IS CLAIMED IS:

1. A stator for a dynamoelectric machine comprising:
an annular stator core in which a plurality of slots extending axially are disposed in a circumferential direction; and
a stator winding installed in said slots, said stator winding being provided with a plurality of winding sub-portions, each of said winding sub-portions comprising:

slot-housed portions housed in housing positions from Address 1 to Address m ($m \geq 4$) lined up in one row from an inner circumferential side to an outer circumferential side in each of said slots; and

coil ends in which said slot-housed portions housed in different addresses in said slots in each slot pair separated by a predetermined number of slots are connected in series outside said slots, said coil ends including:

distant-address joint portions in which said slot-housed portions housed in addresses separated by three or more addresses in said slots in said each slot pair are joined together outside said slots; and

near-address joint portions in which said slot-housed portions housed in addresses separated by two or less addresses in said slots in said each slot pair are joined together outside said slots,

wherein said distant-address joint portions are disposed so as to be separated in a circumferential direction relative to said near-address joint portions.

2. The stator for a dynamoelectric machine according to Claim 1 wherein each of said winding sub-portions is constructed by inserting a

plurality of conductor segments into different addresses in said slots in said each slot pair, said conductor segments each being formed into a U shape, and joining together free end portions of different conductor segments among said conductor segments extending outward from said slots from different addresses in said slots in said each slot pair,

joint portions joining together said free end portions of said conductor segments being constituted by said distant-address joint portions and said near-address joint portions.

3. The stator for a dynamoelectric machine according to Claim 2 wherein said joint portions joining together said free end portions of said conductor segments are arranged in a circumferential direction at a first end of said stator core.

4. The stator for a dynamoelectric machine according to Claim 1 wherein each of said winding sub-portions is constructed by installing one continuous conductor wire so as to occupy different addresses in said slots at intervals of said predetermined number of slots,

said coil ends being constituted by:

turn portions of said continuous conductor wires in which different slot-housed portions among said slot-housed portions in said slots in said each slot pair are linked outside said slots; and

joint portions joining together end portions of said continuous conductor wires in which different slot-housed portions among said slot-housed portions in said slots in said each slot pair are linked outside said slots,

said joint portions joining together said end portions of said continuous conductor wires being constituted by said distant-address joint portions and said near-address joint portions.

5. The stator for a dynamoelectric machine according to Claim 4 wherein said plurality of winding sub-portions are constructed by installing winding assemblies in said stator core so as to be stacked in two or more layers in a slot depth direction, said winding assemblies each being formed by simultaneously folding a plurality of said continuous conductor wires, and

wherein each of said winding assemblies is constructed by arranging continuous conductor wire pairs equivalent in number to said predetermined number of slots so as to be offset by a pitch of one slot from each other, each of said continuous conductor wire pairs being composed of two of said continuous conductor wires arranged so as to be offset from each other by a pitch equivalent to said predetermined number of slots and so as to stack said slot-housed portions in said slot depth direction, and said two continuous conductor wires each being formed into a pattern in which said slot-housed portions are arranged at a pitch equivalent to said predetermined number of slots and adjacent pairs of said slot-housed portions linked by said turn portions are offset so as to alternately occupy different addresses in said slots.

6. The stator for a dynamoelectric machine according to Claim 1 wherein said near-address joint portions are arranged in a circumferential direction so as to have a uniform axial height, and each of said distant-address joint portions is disposed between circumferentially-adjacent pairs of said near-address joint portions at the same axial height as said near-address joint portions.

7. The stator for a dynamoelectric machine according to Claim 6 wherein said near-address joint portions are arranged in at least one row in

a circumferential direction, radial positions of said distant-address joint portions aligning with at least one row of said near-address joint portions arranged in said circumferential direction.

8. The stator for a dynamoelectric machine according to Claim 4 wherein said near-address joint portions are arranged in a circumferential direction so as to have a uniform axial height, and said distant-address joint portions are arranged in a circumferential direction at the same axial height as said near-address joint portions at a first circumferential end of a group of said near-address joint portions arranged in said circumferential direction.

9. The stator for a dynamoelectric machine according to Claim 8 wherein said near-address joint portions are arranged in at least one row in a circumferential direction, radial positions of said distant-address joint portions aligning with at least one row of said near-address joint portions arranged in said circumferential direction.

10. The stator for a dynamoelectric machine according to Claim 4 wherein said near-address joint portions are arranged in a circumferential direction so as to have a uniform axial height, and said distant-address joint portions are arranged in a circumferential direction at the same axial height as said near-address joint portions at first and second circumferential ends of a group of said near-address joint portions arranged in said circumferential direction.

11. The stator for a dynamoelectric machine according to Claim 10 wherein said near-address joint portions are arranged in at least one row in a circumferential direction, radial positions of said distant-address joint

portions aligning with at least one row of said near-address joint portions arranged in said circumferential direction.

12. The stator for a dynamoelectric machine according to Claim 1 wherein said distant-address joint portion is formed by directly joining together extending portions of said slot-housed portions.

13. The stator for a dynamoelectric machine according to Claim 1 wherein said distant-address joint portion is formed by joining together extending portions of said slot-housed portions by means of a metal connection portion.

14. The stator for a dynamoelectric machine according to Claim 1 wherein an electrically-insulating material is interposed in at least one position selected from a group comprising a position between said distant-address joint portion and said near-address joint portion, a position between two of said distant-address joint portions, and a position between two of said near-address joint portions.